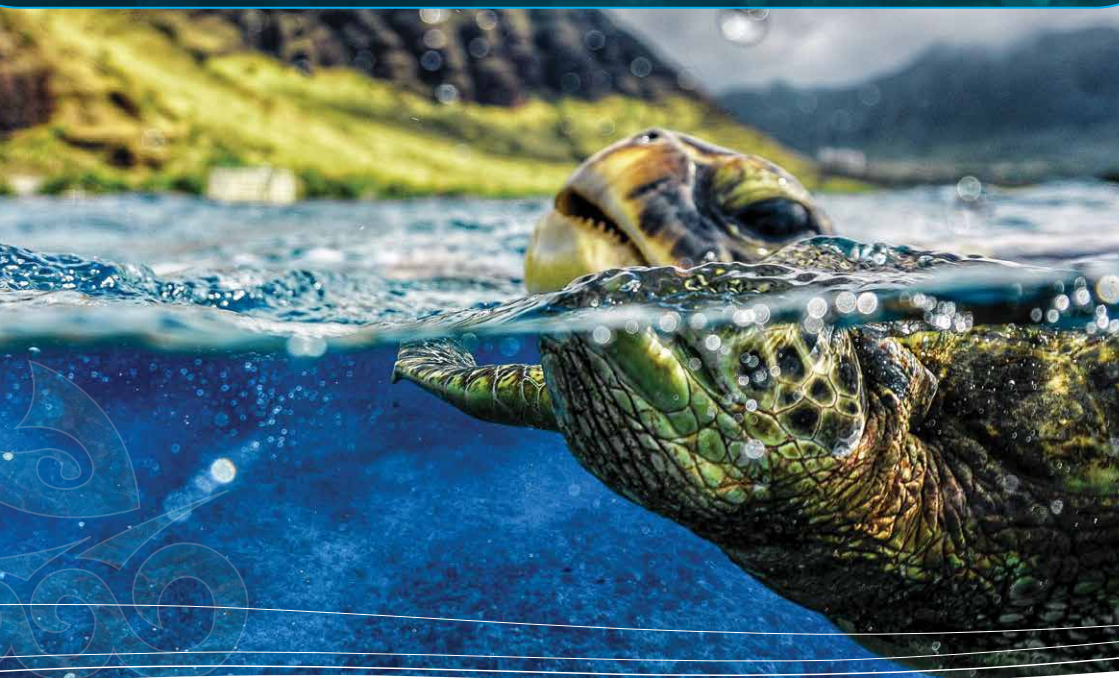


PACIFIC SEA TURTLE FIELD GUIDE

Protocols for Pacific Island Sea Turtle
Monitoring and Data Collection



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Our vision: A resilient Pacific environment sustaining our livelihoods and natural heritage in harmony with our cultures.

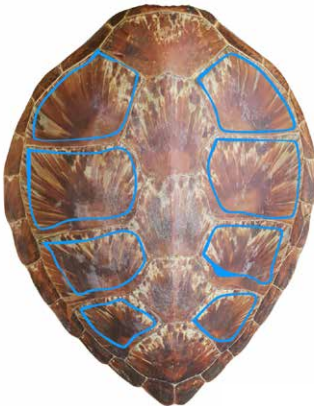
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1. SPECIES IDENTIFICATION

Look at the scales on the head and scutes on the shell. If unsure, take clear photos and ask a trained expert.

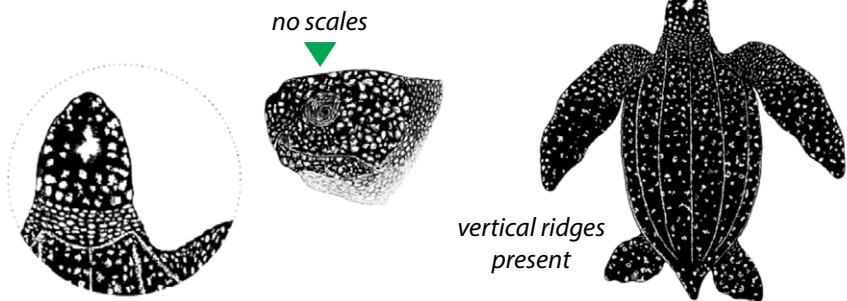
- 01** Count the *prefrontal scales* (markings in red) located between the eyes of the turtle's head



- 02** Count the *costal scutes* (markings in blue) along each side of the turtle's shell (carapace)

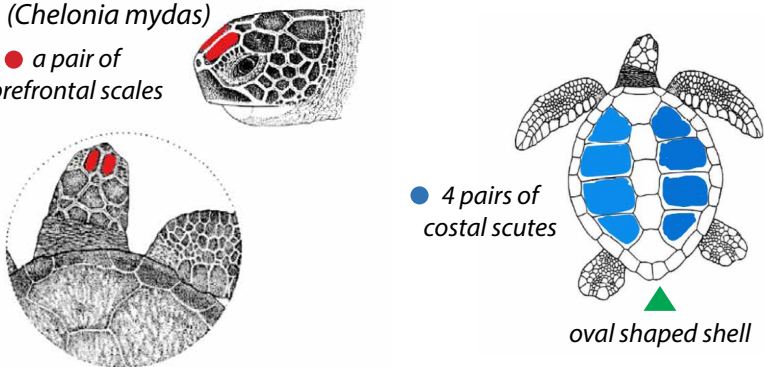
- 03** Confirm and record species (see pages 4 & 5)

Leatherback (*Dermochelys coriacea*)



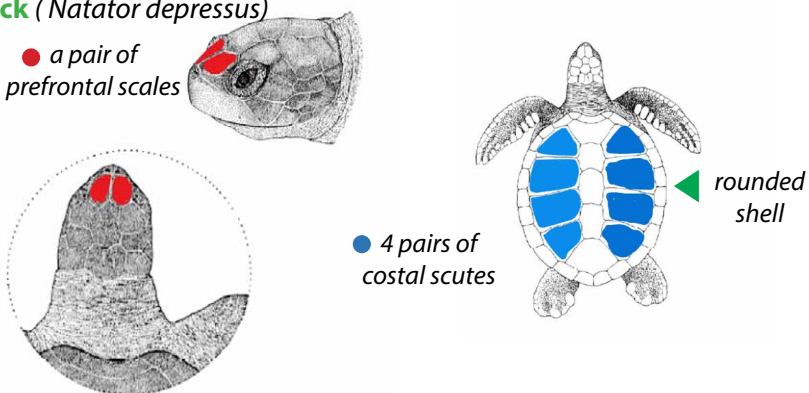
Green (*Chelonia mydas*)

● a pair of prefrontal scales



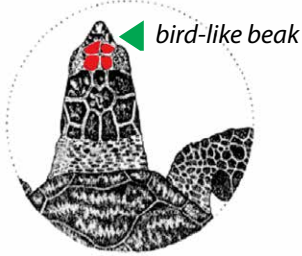
Flatback (*Natator depressus*)

● a pair of prefrontal scales

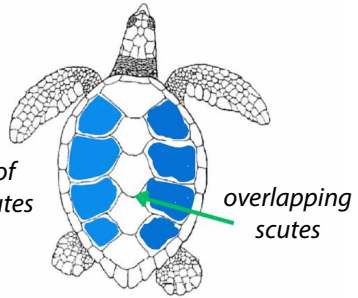


Hawksbill (*Eretmochelys imbricata*)

● 2 pairs of prefrontal scales

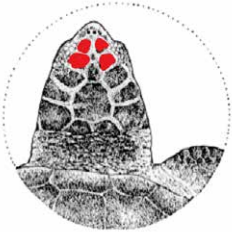


● 4 pairs of costal scutes

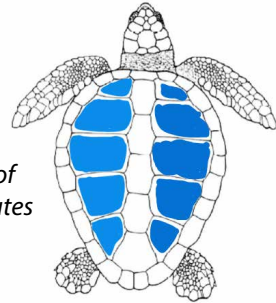


Loggerhead (*Caretta caretta*)

● 2 pairs of prefrontal scales

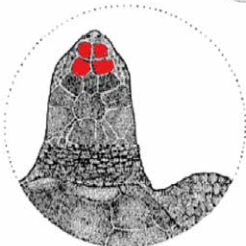
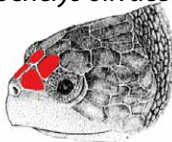


● 5 pairs of costal scutes

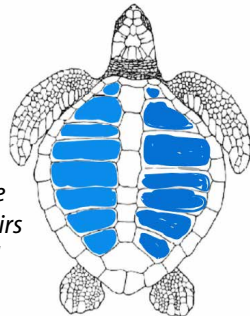


Olive ridley (*Lepidochelys olivacea*)

● 2 pairs of prefrontal scales



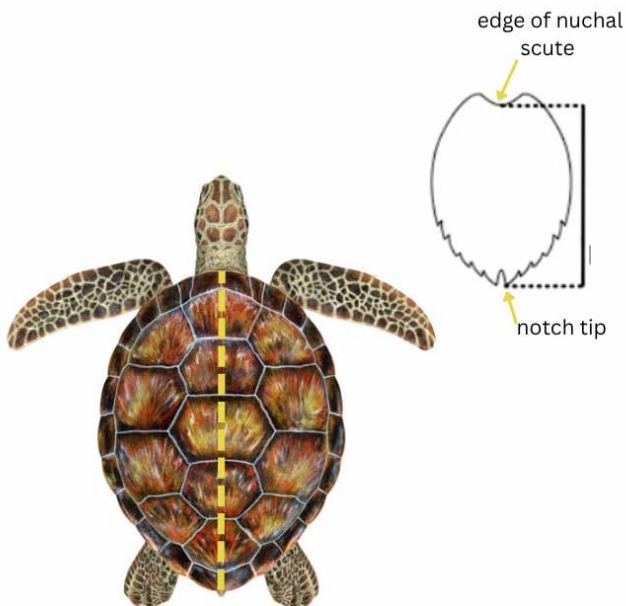
● 5 or more uneven pairs of costal scutes



2. MEASURING A SEA TURTLE

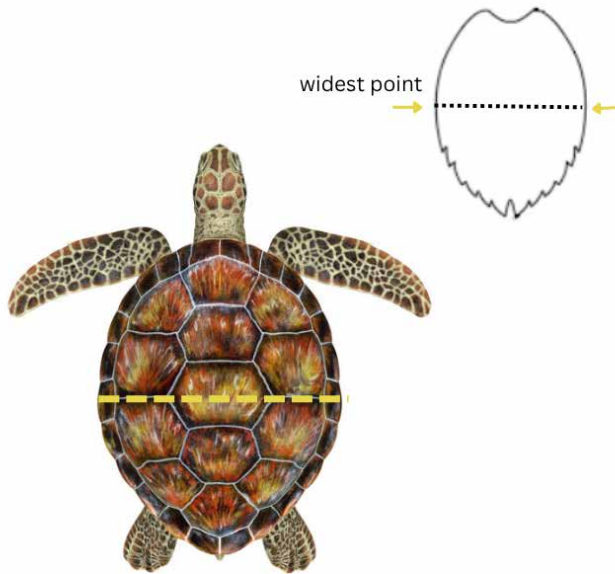
Measure the shell (carapace) length and width using a flexible measuring tape.

Curved Carapace Length (CCL)



- 01 Start at the front edge of the shell (*nuchal scute*)
- 02 Measure to the tip at the back
- 03 Follow the curve of the shell
- 04 Record in centimeters (cm) to one decimal place

Curved Carapace Width (CCW)



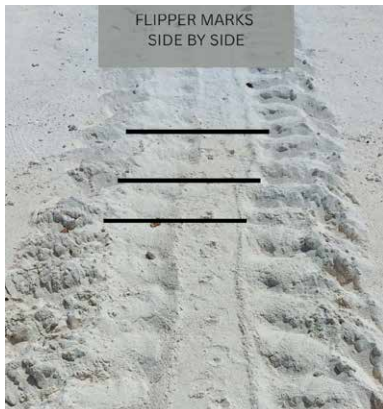
- 01 Find the widest point across the shell
- 02 Measure straight across, following the curve
- 03 Record in centimeters (cm) to one decimal place

Note: Barnacles, or other organisms growing where measurements are to be taken, should be removed with pliers beforehand

3. TURTLE TRACK IDENTIFICATION

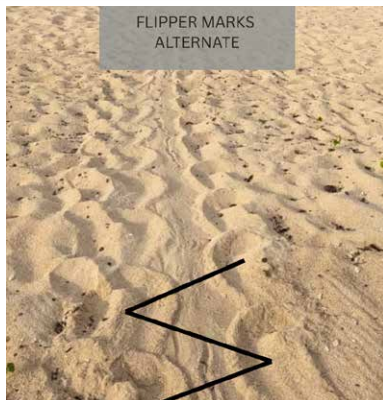
1) Symmetrical Tracks

-  Front flippers are moved forward together
-  Track markings are in line
-  Common in green, flatback and leatherback



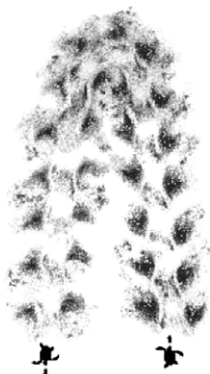
2) Asymmetrical Tracks

-  Front flippers are moved forward one at a time
-  Track markings not in line
-  Common in hawksbill, olive ridley and loggerhead



False Crawls: Sometimes turtles come ashore but don't nest. These are called false crawls.

-  Track may look like nesting, but no digging or disturbed sand
-  Caused by hard sand, obstacles, people nearby, or disturbance



4. TAGGING A SEA TURTLE

What you need:

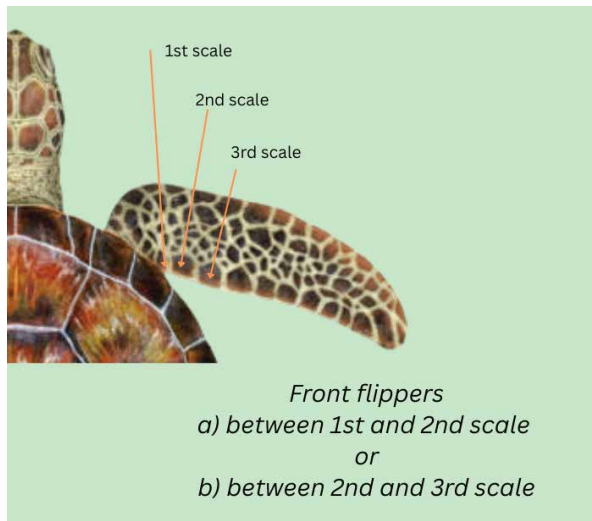
-  Flipper tags
-  Tag applicator

Before tagging:

-  Check all flippers for existing tags
-  If a tag is present, record species, tag ID (include all zeros), date of encounter, and location
-  If no tag, look for any tag scars and note it down
-  If no tag is present, proceed to tag the turtle

Tag placement:

-  Front flippers, between the 1st and 2nd scale or 2nd and 3rd scale
-  You can place a tag on each of the front flipper



How to tag a turtle in 2 simple steps:

- 01 Clamp the applicator so the sharp tip gently pierces through the flipper
- 02 Press firmly to bend the tag point and lock it securely into place. Check underside of flipper to confirm secure placement



Note: Leave about 1 cm between the tag and the edge of the flipper

Record Tag ID number (include all zeros), date and location (GPS or site name)

5. COLLECTING GENETICS SAMPLES

Before collection:

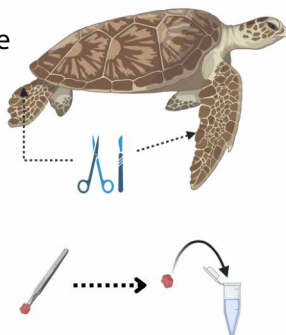
Make sure you have appropriate approvals from local authorities.

What you need:

-  Single-edge blade or pair of clean scissors
-  Alcohol swabs
-  Antiseptic (betadine)
-  Forceps
-  Vials with preservative (concentrated salt solution or 90% ethanol)
-  Labels and marker

How to collect tissue samples?

-  01 Clean the edge of the front flipper or back flipper with alcohol swab
-  02 Use blade or scissors to cut a small piece of skin (about 3 x 1.5 mm)
-  03 Use forceps to place the sample in vials with preservatives
-  04 Apply betadine to the sampling area
-  05 Label the vials with turtle ID, date, and location
-  06 Record the data



Storing samples:

-  Keep in a cool, shaded place during fieldwork
-  Avoid direct sunlight or heat
-  For long-term storage, place samples in a refrigerator

NEED MORE INFORMATION?

The SPREP Sea Turtle Monitoring Manual is a detailed guide to selecting appropriate tools for basic sea turtle research and monitoring in the Pacific Region.



Aside from traditional tagging, the manual covers interviews, literature reviews, hatching counts, satellite tracking, genetic sampling, aerial, boat, bycatch, drone, foot and vehicle surveys amongst 25 different monitoring processes.



Please use this QR code to download a PDF version of the manual.

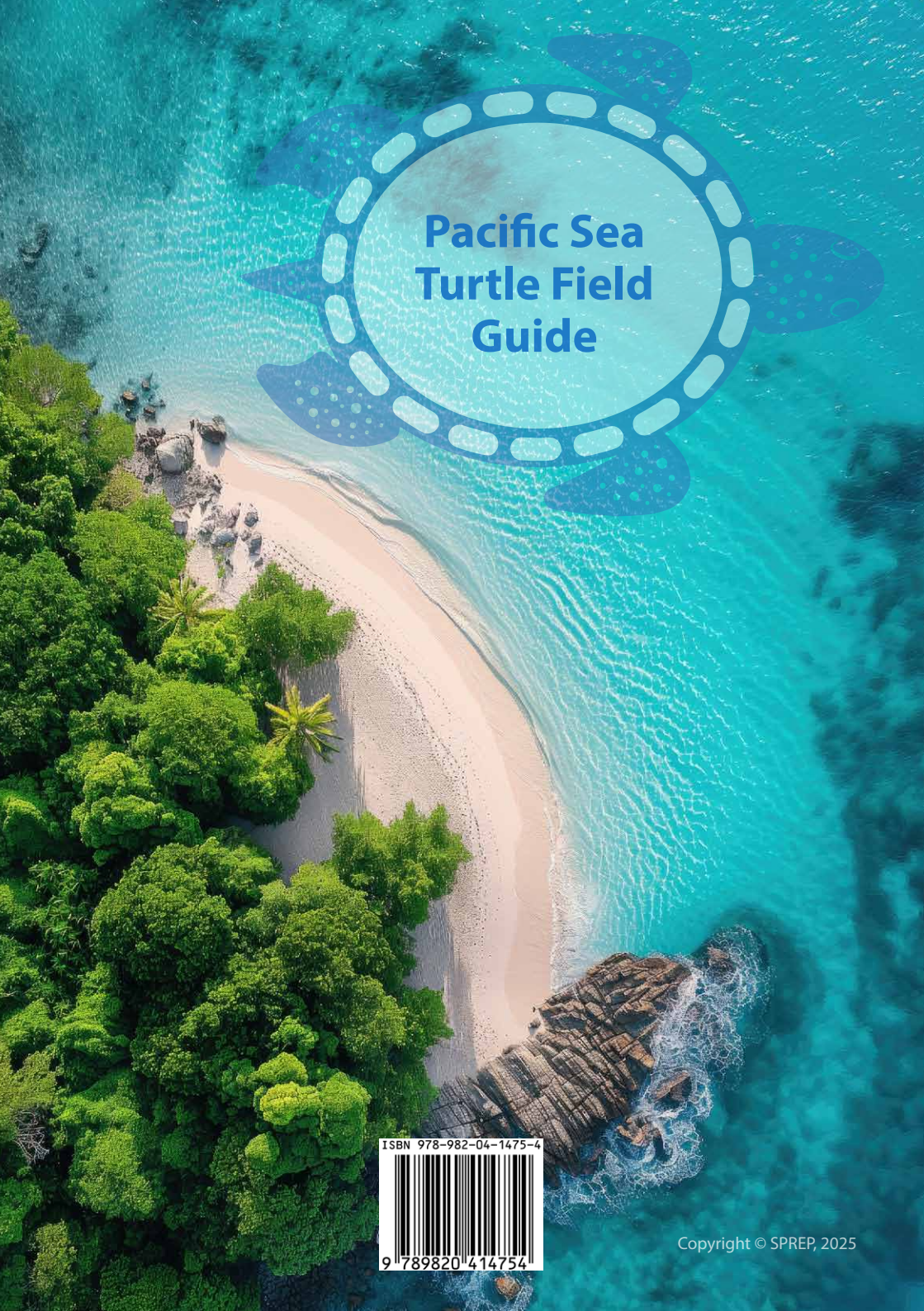
WHAT IS TREDs?

TREDs is the Turtle Research and Monitoring Database System that provides invaluable information for Pacific island countries and territories to manage their turtle data resources.

You can input your data from strandings, tagging, nesting, emergence, and beach surveys as well as other biological data on sea turtles into the database.

www.sprep.org/thetreds

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